



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/693,001 | 10/24/2003 | William C. Phillips | 1023-291US01 | 9336 |

28863 7590 03/03/2006
SHUMAKER & SIEFFERT, P. A.
8425 SEASONS PARKWAY
SUITE 105
ST. PAUL, MN 55125

EXAMINER

ROBERTS, DARIN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3762

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/693,001 | Applicant(s) PHILLIPS ET AL. | |
| | Examiner Darin R. Roberts | Art Unit 3762 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/2/2004; 12/14/05</u> <u>12-6-05</u> | 6) <input checked="" type="checkbox"/> Other: <u>12/2/05; 9/8/05; 10/13/04</u> |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 is both vague and indefinite, for omitting a connection to a secondary element, the aforementioned claim is simply a listing of parts. The cable should be connected to the antenna since the programmer is only functionally recited.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1-4, 7, 18-20, 23, & 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Cimochoowski et al. (US 5967986 B1).

In reference to **claims 1, 4, 18, & 25**, the Cimochoowski et al. patent teaches a signal transfer unit (see abstract) enabling transfer of physiological data from a physiological sensor attached to a mammalian subject in use (which includes both internal and external devices), to a remote base station (see abstract and fig. 12). According to the Webster's II New Riverside University dictionary the ring like structure of figures 12 within the Cimochoowski et al. patent fit the definition of both a channel and an aperture because an aperture is defined as *an opening as a hole gap or slit*, and a channel is defined as *a course through which something can be directed or moved*, and though such a ring was not constructed to, it is still capable of holding a portion of clothing associated with a patient due to the fact that the clothing can be placed within the opening, and in turn hold the ring shaped antennae in a relatively fixed position relative to an implanted medical device. The Cimochoowski et al. patent teaches the use of a cable or cord of some sort to connect the coil with the with the power supply and monitoring console (see fig. 12)

In reference to **claim 2 & 19**, the ring shaped antenna of figure 12 inherently possesses a wide end that can be used for the insertion of clothing.

In reference to **claims 7 & 23**, referring to an object or orifice, as being teardrop shaped is quite broad considering the fact that a teardrop can be a multitude of shapes considering its environment. Teardrops can appear to be circular, similar to the coil of the Cimochoowski et al. patent, in many environments.

In reference to **claims 3 & 20**, because the opening of the coil can be defined as both a channel and an aperture, if the coil of the device were held vertically then rotated about its vertical axis, the channel/aperture of the device would appear to be much thinner than the channel/aperture of the coil that is not rotated. The examiner suggests that the applicant alters the phraseology of the claim to state that the thinner channel is disposed next to, above, or beneath the wider aperture, or something of the like.

Claim 9, 10-12, 15, 18-10, & 23 is rejected under 35 U.S.C. 102(e) as being anticipated by Pool et al (US 6561975 B1).

In reference to **claim 9**, the Pool et al. patent teaches a device that is capable of communicating with an implanted device, as well as teaching that the antenna can be housed within a belt (see column 8, lead lines 34-38). Such a housing inherently possesses the ability to have clothing pulled through the channel created by buckling the belt, thereby holding the antenna in a substantially fixed position relative to the implanted device.

In reference to **claim 10, 19**, the Pool device inherently possesses a wide end to pull clothing through (see column 8, lead lines 34-38).

In reference to **claims 11 & 20**, because the opening of the belt like housing of the antenna can be defined as both a channel and an aperture, if the belt like housing of the device were held vertically then rotated about its vertical axis, the channel/aperture of the housing would appear to be much thinner than the channel/aperture of the coil when it is not rotated. The examiner suggests that the applicant alters the phraseology

Art Unit: 3762

of the claim to state that the thinner channel is disposed next to, above, or beneath the wider aperture, or something of the like.

In reference to **claim 15**, referring to an object or orifice as being teardrop shaped is quite broad considering the fact that a teardrop can be a multitude of shapes considering its environment. Teardrops can appear to be circular, similar to the belt like housing of the Pool et al. patent, in many environments.

In reference to **claim 12, 18**, the Pool patent teaches a signal transfer unit (see abstract) enabling transfer of physiological data from a physiological sensor attached to a mammalian subject in to a remote device (see abstract). According to the Webster's II New Riverside University dictionary the ring like structure of the belt described within the Pool et al. patent (see column 8, lead lines 34-38) fits the definition of both a channel and an aperture because an aperture is defined as *an opening as a hole gap or slit*, and a channel is defined as *a course through which something can be directed or moved*, and though such a ring was not constructed to, it is still capable of holding a portion of clothing associated with a patient due to the fact that the clothing can be placed within the opening, and in turn hold the ring shaped antennae in a relatively fixed position relative to an implanted medical device. The pool et al. patent teaches the use of a "wand or some other extendible head, containing at least an antenna, is connected to the remainder of the programmer unit via a stretchable coil cable ..." (see column 3, lines 6-11)

In reference to **claims 23**, referring to an object or orifice, as being teardrop shaped is quite broad considering the fact that a teardrop can be a multitude of shapes

Art Unit: 3762

considering its environment. Teardrops can appear to be circular, similar to the aforementioned belt like housing of the Pool et al. patent, in many environments.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5, 6, 8, 16, 21, 22, 24, & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cimoichowski et al. (US 5967986 B1).

In reference to **claims 5, 6, 21, & 22**, the Cimoichowski et al. patent discloses the claimed invention except for rubberized grips. It would have been obvious to one of ordinary skill in the art at the time of the invention's conception to modify the antenna of

Art Unit: 3762

the claimed device with rubberized grips since it is known in the art that rubberized grips can be used to improve the device's portability.

In reference to **claim 8 & 24**, though the Cimochoowski et al. patent does not teach the use of an insulative telemetry head housing that encases the antenna, the Cimochoowski et al. patent does teach the use of telemetry coil that act as antennae (see fig. 12) and such housing is common in the art.

Thus it would have been obvious to one of ordinary skill in the art to incorporate such housing into the Cimochoowski et al. invention to protect the coils from damage and as a result of the commonality of said housing in the art.

In reference to **claims 16, 26**, the Cimochoowski et al. patent discloses the claimed invention except for a neurostimulator, however the Cimochoowski et al. patent does teach the use of an implanted device in conjunction with an external programming device, and the use of an external programmer in conjunction with an internal device is quite common.

Thus it would have been obvious to one of ordinary skill in the art at the time of the claimed invention's conception to modify the implanted neuralstimulator with an external programmer due to the commonality of such a combination and to provide the user with a convenient means for adjusting the stimulation parameters of the implanted device.

Claims 13, 14, 21, & 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pool et al. (US 6561975 B1).

Art Unit: 3762

In reference to **claim 13, 14, 21, & 22**, the Pool et al. patent discloses the claimed invention except for rubberized grips. It would have been obvious to one of ordinary skill in the art at the time of the invention's conception to modify the antenna of the claimed device with rubberized grips since it is known in the art that rubberized grips can be used to improve the device's portability.

In reference to **claims 17 & 26**, the Pool et al. patent discloses the claimed invention except for a neurostimulator, however the Pool et al. patent does teach the use of an implanted device in conjunction with an external programming device, and the use of an external programmer in conjunction with an internal device is quite common.

Thus it would have been obvious to one of ordinary skill in the art at the time of the claimed invention's conception to modify the implanted neurostimulator with an external programmer due to the commonality of such a combination and to provide the user with a convenient means for adjusting the stimulation parameters of the implanted device.

Allowable Subject Matter

Claims 3, 11, & 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Art Unit: 3762

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner has chosen to site the following references because they mention the use of an external programmer in conjunction with an implanted device such as a neurostimulator: Batina et al. (US 4586508 A), Rise et al. (US 4690144 A), Fischell et al. (US 2004/0199212 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darin R. Roberts whose telephone number is (571) 272-5558. The examiner can normally be reached on 7:00am to 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D. Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-9900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Darin Roberts
Patent examiner
Art Unit 3762




GEORGE R. EVANS
PRIMARY EXAMINER

2/24/6

Application/Control Number: 10/693,001

Page 10

Art Unit: 3762

D. R.